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## Patent Abstracts of Japan

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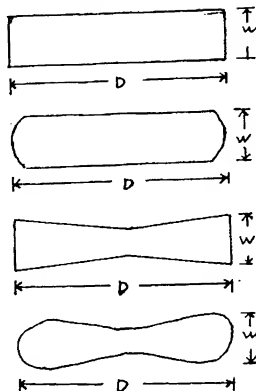
APPLICATION DATE : 30-05-85  
APPLICATION NUMBER : 60117523

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INVENTOR : HIRATA KEIICHI;

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TITLE : PITCH-BASED CARBON FIBER AND PRODUCTION THEREOF



ABSTRACT : PURPOSE: To provide the titled carbon fiber having oblong circular contour of the cross-section, containing crystals oriented perpendicular to the outer circumference taking a folded structure, free of cracks and having high fiber strength.

CONSTITUTION: The spinneret used in the present process has noncircular cross-section characterized by the nozzle flatness  $W/D$  of  $1/1.5 \sim 1/10$ , preferably  $1/2 \sim 1/6$  wherein  $W$  is the length of minor side or minor diameter and  $D$  is the length of major side or major diameter. Mesophase pitch having a viscosity of  $100 \sim 2,000$  poise in the nozzle is spun in molten state keeping the extrusion pressure difference between both sides of the spinneret capillary to  $\leq 1 \text{ kg/cm}^2$  and the spun fiber is infusibilized, carbonated and, if necessary, graphitized to obtain the objective carbon fiber.

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